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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,394	09/27/2003	Fred Hoffman	28679/05100	2393
24024	7590	11/16/2004	EXAMINER	
CALFEE HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114			GRAVINI, STEPHEN MICHAEL	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,394

Applicant(s)

HOFFMAN ET AL.

Examiner

Stephen Gravini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-7, 9-13, 15-16, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomas (US 6,391,098). Thomas is considered to disclose the claimed assembly and method comprising:

an air dryer **24** including a manifold (please see column 3 line 45 wherein the disclosed air flow split is considered to anticipate the claimed manifold) and a desiccant cartridge **34**;

a bore **A1** or **A2** running through said manifold; and

a fastener, which includes a spin-on desiccant cartridge, disposed in said bore, wherein air flow passing through the air dryer intersects the bore and communicates to a purge volume (please see column 2 lines 42-47 wherein broad discussion of screw threaded pressure bearings for inlet and outlet modular pressure fittings is considered to imply the claimed bore fastener for airflow intersection) wherein said fastener or mounting fastener either connects said air dryer manifold to the purge volume or is secured to a reservoir **50** including fastening means thereof;

optionally a means for preventing rotation of the air dryer when said air dryer is secured to the purge reservoir including a second fastener placed through a bore on an extension disposed on said manifold (again please see column 2 lines 42-47 wherein broad discussion of screw threaded pressure bearings for inlet and outlet modular

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pressure fittings is considered to imply the claimed rotation prevention means); or alternatively

delivering a flow of air to an air dryer manifold with a desiccant bed canister attached thereto (please see column 3 lines 16-29);

passing said flow of said air through the desiccant bed, thereby drying the air (please see column 3 lines 35-41);

delivering the dried air to a set of downstream components (please see column 4 lines 32-58);

purging the desiccant bed with purge volume to regenerate the a purge flow from a desiccant bed (please see column 3 lines 35-41); and

exhausting said purge flow after it has passed through said desiccant bed (please see column 4 line 31);

wherein said purge flow passes from via a bore in said manifold in which said purge volume a fastener securing said air dryer to the vehicle is disposed (please see column 2 lines 42-47 wherein broad discussion of screw threaded pressure bearings for inlet and outlet modular pressure fittings is considered to imply the claimed fastener for vehicle securing). Thomas is also considered to disclose the claimed stabilization and rotation prevention means including a bolt (please see column 2 lines 42-47 and the accompanying analysis discussed above in this rejection), two or more protruding arms **36** and **40**, commercial vehicle air brake system connection (column 1 line 3), and first and second passageways (column 4 lines 20-43).

Claim Rejections - 35 USC § 103

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas. Thomas is considered to disclose the claimed invention, as discussed above in the anticipatory rejection, except for the claimed corresponding thread measurements. It would have been an obvious matter of design choice for one skilled in the art to claim the corresponding thread measurements, since it has not been specified that the claimed corresponding thread measurements provide any advantage over the prior art threaded correspondence discussed in primary reference Thomas.

Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Shamine et al. (US 5,622,544). Thomas is considered to disclose the claimed invention, as discussed above in the anticipatory rejection, except for the claimed interlock or anti-rotation mechanism. Shamine, another air dryer, is considered to disclose the claimed interlock or anti-rotation mechanism at column 5 lines 7-21 wherein the disclosed interlock function implies the claimed anti-rotation mechanism to prevent air dryer rotation, in the same manner and function as the claimed interlock. It would have been obvious for one skilled in the art to combine the teachings of primary reference Thomas with the teachings in secondary reference Shamine of the interlock or anti-rotation mechanism for the propose of providing a secure fastener connection of an air dryer connection to its supporting housing.

Claim s 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas. Thomas is considered to disclose the claimed invention, as discussed above in the anticipatory rejection, except for the claimed mounting bracket to rail height ratio.

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It would have been an obvious matter of design choice for one skilled in the art to claim the mounting bracket to rail height ratio, since it has not been specified that the claimed mounting bracket to rail height ratio provides any advantage over the mounting bracket to rail height ratio shown and implicitly discussed in primary reference Thomas.

Response to Arguments

Applicant's arguments filed October 8, 2004 have been fully considered but they are not persuasive.

anticipation

The Office must construe claims using broadest reasonable interpretation consistent with the specification. Primary reference Thomas is considered to anticipate the claimed invention as discussed above. Applicants argue that the disclosed desiccant compartment **34** is threadably secured to control valve **32** but does not include a fastening means for securing the air dryer to the purge volume wherein the fastener is disposed within a bore or communication means. Column 3 of the primary reference best describes the Office interpretation of the claimed invention. As claimed and interpreted from the specification, the claimed air dryer **24** includes a manifold (disclosed as switchable control valve **32**) and a desiccant cartridge **34**. By applicants admission, these components are threadably secured. Therefore, it is considered that the primary reference discloses every element of the claimed invention and that the anticipatory rejection is appropriate for claims 1, 10, 15, and, 16. Furthermore, applicants have amended the claimed invention to include a fastener secured to a reservoir (claim 11). Thomas is considered to teach fastener secured reservoir **26** since

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the flow path includes a threadably secured engagement, by applicants admission above. Finally, as discussed above under the anticipatory rejection, the claimed means for preventing rotation (claim 18) is considered to be patentably distinct from the claimed interlock (claim 14) or claimed anti-rotation mechanism (claim 17) because means for preventing rotation is implicitly taught by the disclosed pressure fittings similar to an oil filter to prevent unfastening by means for preventing rotation. The claimed means for preventing rotation is broadly construed to be a statement of intended use for the structure securing the air dryer to the purge reservoir and can be further implicitly interpreted from the component construction at column 5 lines 38-42 or from the compact nature of the component at column 6 lines 17-25.

obviousness

Current Office practice permits obviousness rejections when a primary reference discloses the claimed invention except for an element that is found in another secondary reference and it would be obvious to one skilled in the art to combine those references because, when read as a whole the reference provides motivation or suggestion to combine the references. Applicants argue that the interlock or anti-rotation mechanism, considered disclosed by secondary reference Shamine, is used for a different purpose than claimed. In this case, the secondary reference was not cited for the intended use of the claimed interlock or anti-rotation mechanism, because it is considered that the claimed means for preventing rotation is considered disclosed in primary reference Thomas. Rather, the secondary reference was cited to show that it would have been obvious to one skilled in the art to combine the teachings of Thomas

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with the interlock or anti-rotation mechanism, considered disclosed by Shamine. It is considered that the obviousness rejections of claims 14 and 17 are appropriate under current Office practice. With respect to the arguments regarding design choice for the bracket to rail height ratio, primary reference Thomas discusses the compact nature of the air dryer at column 6 lines 17-25. With respect to claim 21, the claimed bracket to rail height ratio is silent with respect to trucks and the Office does not normally import specification language or arguments into the broadest meaning of the claim language. In this case the bracket to rail height ratio is construed to be merely a design choice, and the obviousness rejection is considered appropriate under current Office practice.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

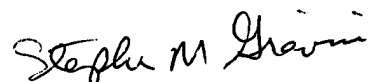
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 703 308

7570. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 703 308 1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smg



November 11, 2004